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## Clearing power faults

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### Symptoms:

|                                                                      |    |
|----------------------------------------------------------------------|----|
| Main circuit breaker and all LEDs off (option 21A) . . . . .         | 27 |
| Main circuit breaker on but all LEDs off (option 21A) . . . . .      | 28 |
| Green LED off on module power supply (option 21A) . . . . .          | 29 |
| Circuit breakers and all column LEDs off (DC power) . . . . .        | 30 |
| Circuit breakers on but all column LEDs off (DC power) . . . . .     | 32 |
| Green LED off on module power supply (DC power) . . . . .            | 33 |
| Defective blower unit indicated (DC power) . . . . .                 | 35 |
| Main circuit breaker and all column LEDs off (AC power) . . . . .    | 36 |
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| Breaker off on MPDU (AC power) . . . . .                             | 39 |
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## Power faults

Various electrical voltages are required to power the Meridian 1. These electrical voltages are developed and delivered by the power equipment system. Cooling and monitoring devices are interconnected with the power system. [Figures 1, 2, and 3](#) show power, cooling, and monitoring equipment that may be located in a column, including:

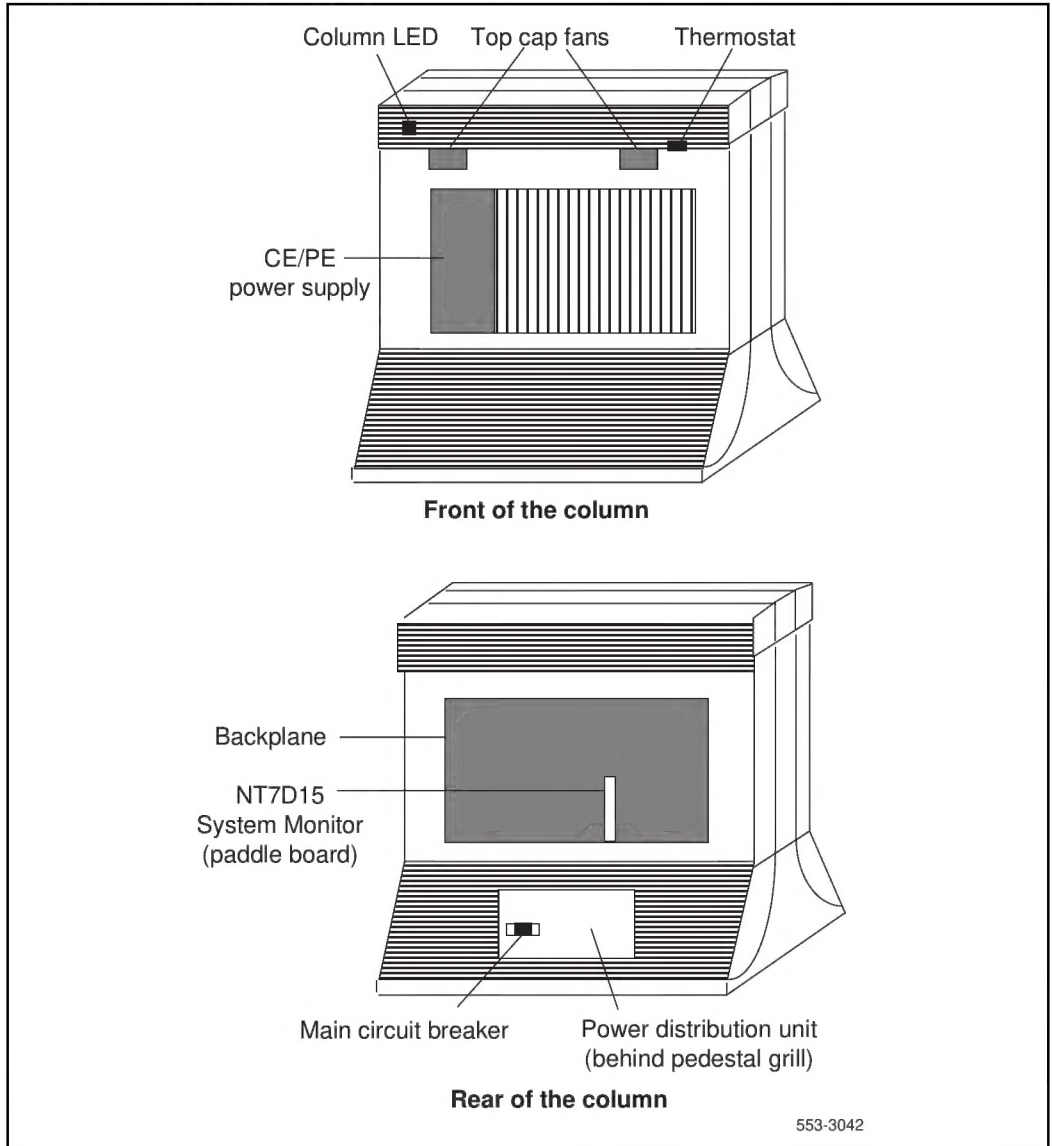
- air probe: increases the impeller speed as the temperature goes up (not equipped in option 21A)
- blower unit: provides cooling for the column (not equipped in option 21A)
- module power distribution unit (MPDU): houses circuit breakers for some module power supplies (AC power only and not equipped in option 21A)

**Note:** In DC-powered systems, there is a switch on each power supply, so MPDUs are not required.

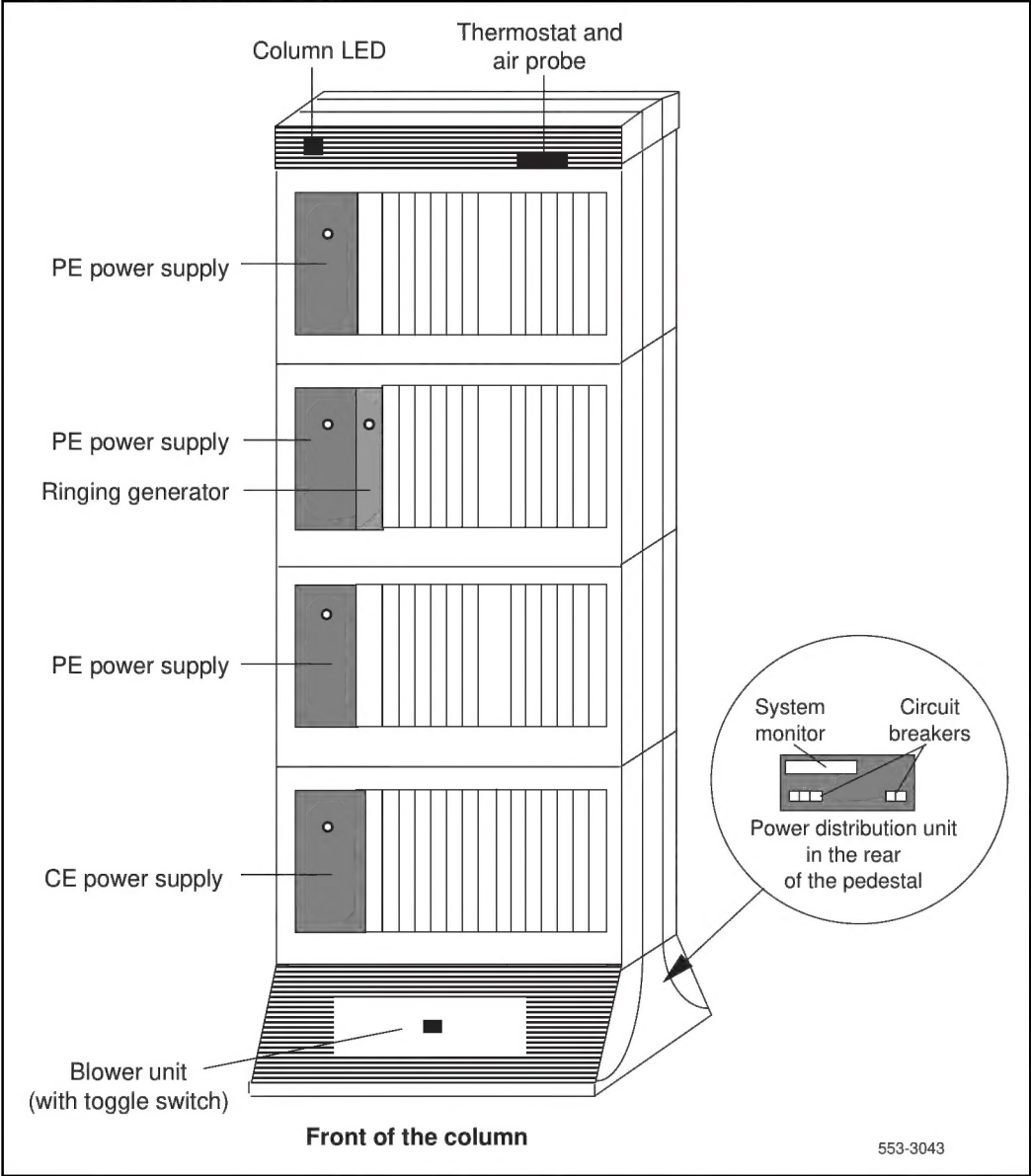
- power distribution unit (PDU): distributes power from the external source to module power supplies and houses the column circuit breaker(s)
- module power supply: converts voltage from the PDU to the voltages needed in each type of module
- ringing generator: provides current to ring 500/2500 telephones and to light the message waiting light on the 2500 telephones
- system monitor: monitors power and temperature conditions
- thermostat: monitors column temperature
- top cap fan: cools the power supply (option 21A only)

Power faults can disable ringing for 500/2500 telephones, message waiting lights on 2500 telephones, all the cards in a module, all the modules in a column, or the entire system.

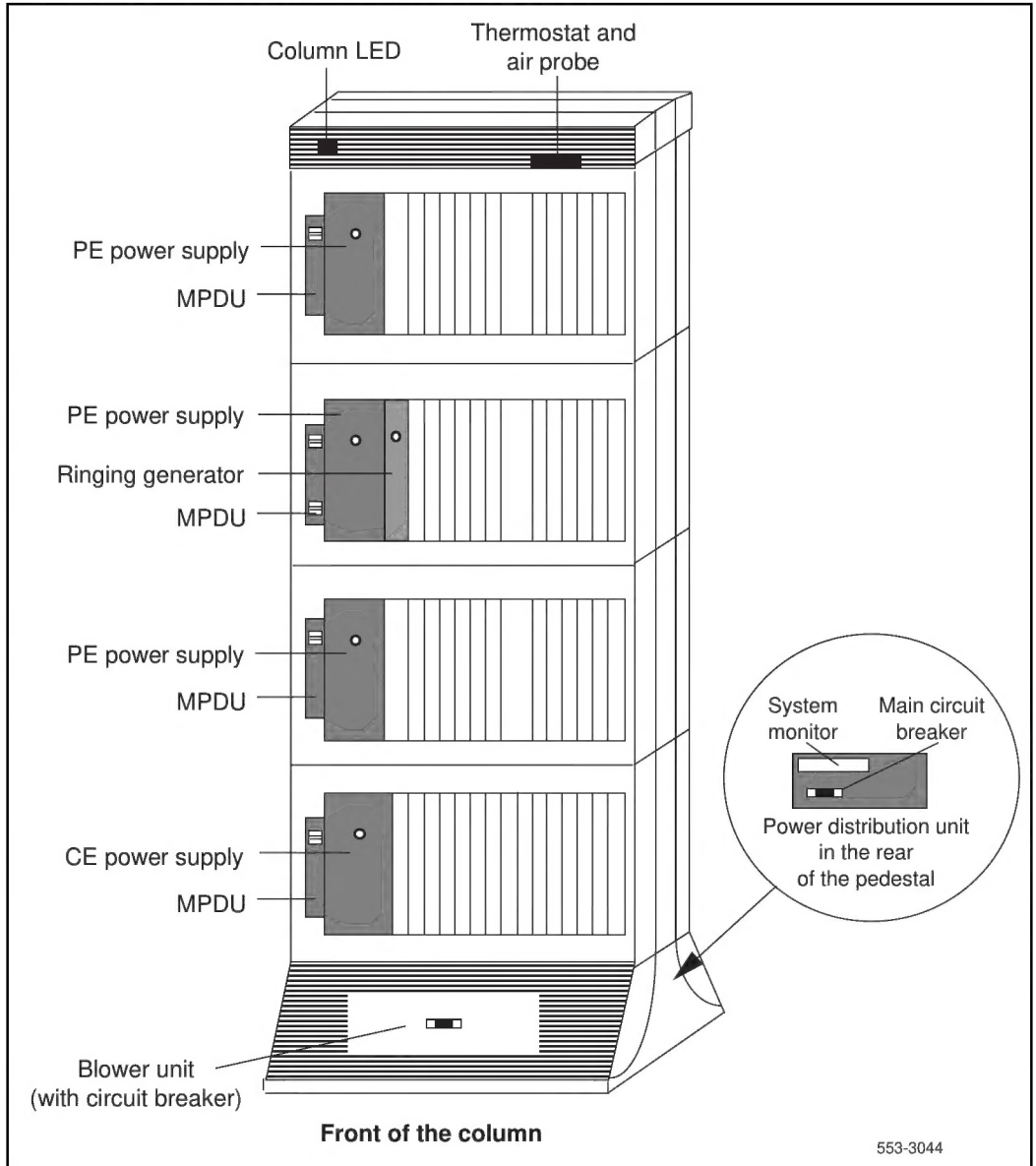
**Figure 1**  
**Power equipment—option 21A**



**Figure 2**  
**Internal DC power equipment**



**Figure 3**  
**Internal AC power equipment (except option 21A)**



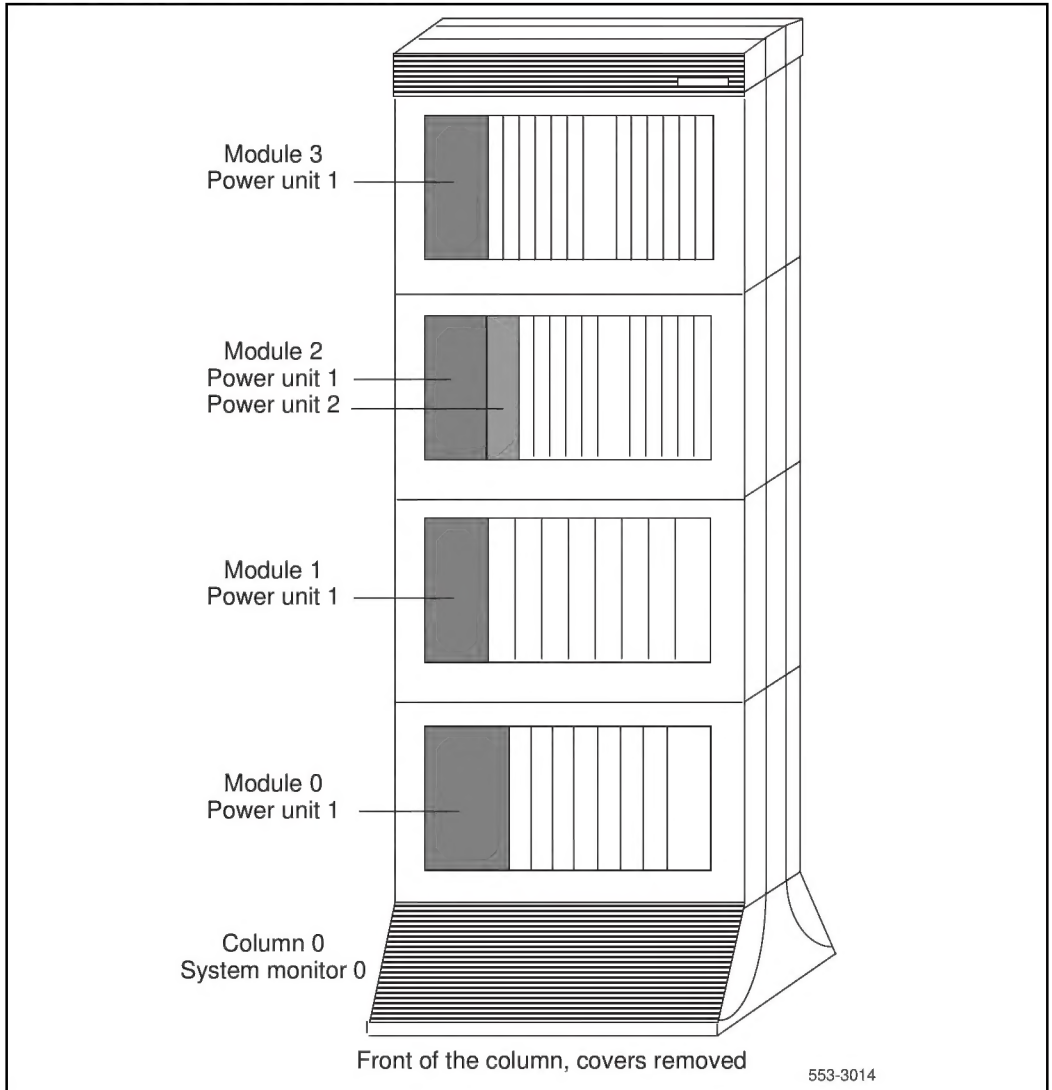
## Fault clearing procedures

System messages with the mnemonic PWR (power) contain four fields of information about power equipment. These fields identify the type of equipment indicated (such as the blower unit) and the source of the message (system monitor, module, or module power supply). [Table 7](#) defines the fields in PWR messages. [Figure 4](#) shows the power equipment identified in PWR messages.

**Table 7**  
**PWR message fields**

| PWRxxxx (HW) (SM) (UEM) (U) |                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| HW                          | Hardware type, one of the following: <div><div>CRBK</div><div>Circuit breaker</div><div>DCSP</div><div>DC power supply</div><div>FANU</div><div>Blower unit</div><div>PFTC</div><div>Power fail transfer</div><div>PWSP</div><div>Module power supply, including ringing generator</div><div>THSW</div><div>Thermal switch</div><div>UPSA</div><div>Uninterruptible power supply (UPS) alarm</div><div>XSMC</div><div>System monitor card</div></div> |
| SM                          | System monitor (0-63) generating the message (0 is the master system monitor)                                                                                                                                                                                                                                                                                                                                                                         |
| UEM                         | Module (0-3) reporting the condition                                                                                                                                                                                                                                                                                                                                                                                                                  |
| U                           | Number of the power supply (1-2) in the module                                                                                                                                                                                                                                                                                                                                                                                                        |

**Figure 4**  
**Power equipment designations**



[Table 8](#) lists common power fault indications. To clear faults, select the symptom that most resembles the fault indications, then go through the procedure for clearing each possible cause until the fault is fixed. Once the fault is corrected, disregard the remaining possible causes.

**Note:** You must clear power faults before you try to clear other types of faults in the system.

If the fault is not cleared after you have gone through each possible cause, check the most recent fault indications. Also check [“Clearing power faults” on page 19](#) to see if another type of fault is indicated.

After the fault is corrected, go to “Final maintenance procedure” on page 177 to completely restore normal operation.

**Table 8**  
**Power fault indicators**

| Indicator         | Possible indications                                                                                                                                                            |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| System messages   | BSD090 (Program has detected a power fault indication. Check PWR messages.)<br>PWR messages                                                                                     |
| Visual indicators | Major alarm on attendant consoles<br>Red LED lit on column top cap<br>Green LED off on module power supply<br>LED lit on PFTU<br>Circuit breaker tripped (down)<br>Remote alarm |
| User reports      | Major alarm reported by attendant<br>No ring on 500/2500 telephones                                                                                                             |

**WARNING**

Modules covers are *not* hinged; do *not* let go of the cover. Lift the cover away from the module and set it out of your work area.



**Symptom:****Main circuit breaker and all LEDs off (option 21A)**

All the LEDs in the system are off and the main circuit breaker on the PDU is tripped. Use this procedure to clear the problem.

**Note:** High room temperature or a power surge can shut down the system. Check the temperature of the room and voltages at the commercial power outlet.

Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520). You may need to replace one of the following:

- Thermostat harness: NT8D46AC
- Top cap fan: A0321130
- System monitor cables

| Possible cause                         | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Short circuit or damage                | <p>Look for signs of damage (such as smoke, burnt contacts, or melted insulation) that may be caused by a short circuit or misplaced equipment.</p> <p>If you do not find a problem of this type, go to the next possible cause.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Thermal overload                       | <p>Make sure nothing is blocking ventilation throughout the system. Allow the system to cool for a few minutes, then reset the breaker.</p> <p>If the breaker trips immediately, check the thermostat harness:</p> <ul style="list-style-type: none"> <li>— Make sure the harness is securely connected to the module.</li> <li>— Use an ohmmeter to check the connector pins for the harness; if there is an open circuit between pins 3 and 4 or between pins 5 and 6, replace the harness.</li> </ul> <p>If the breaker does not trip immediately, listen for the sound of the top cap fan. If you do not hear the fan, replace it.</p> <p>If there is no problem with this equipment, go to the next possible cause.</p> |
| Defective connection to system monitor | <p>Make sure the cable to connector J3 is securely connected to the system monitor. Also check the system monitor connection to the module.</p> <p>If the breaker trips with all cables connected, replace the cables one at a time until the breaker stays on.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

Symptom:

Main circuit breaker on but all LEDs off (option 21A)

All the LEDs in the system are off but the main circuit breaker on the PDU is not tripped. Use this procedure to clear the problem.

Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520). You may need to replace one of the following:

- PDU: NT8D53AD
- Main power cord
- UPS

| Possible cause                                                                              | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power cord not connected                                                                    | <div>If the power cord for the column is unplugged, plug it in.</div> <div>If the power cord is already plugged in or if the column LEDs do not light and the breaker trips when reset, go to the next possible cause.</div>                                                                                                                                                                                                                                                                               |
| <div>WARNING</div> <div>The following tests are performed on a live power connection.</div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| No power at outlet                                                                          | <div>With a meter or test lamp, test for AC power at the outlet.</div> <div>If there is no power at the outlet when AC power is supplied through a UPS unit, repair or replace the UPS following the manufacturer's instructions.</div> <div>If there is no power at the outlet when AC power is supplied through commercial service (not through a UPS), take the necessary steps to have the commercial power restored.</div> <div>If there is power at the outlet, go to the next possible cause.</div> |
| Defective power cord                                                                        | <div>With a meter or test lamp, test the field wiring connections (behind the PDU) for AC power.</div> <div>If there is no power, replace the power cord.</div> <div>If there is power at the connections, go to the next possible cause.</div>                                                                                                                                                                                                                                                            |
| Defective PDU                                                                               | Replace the PDU.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

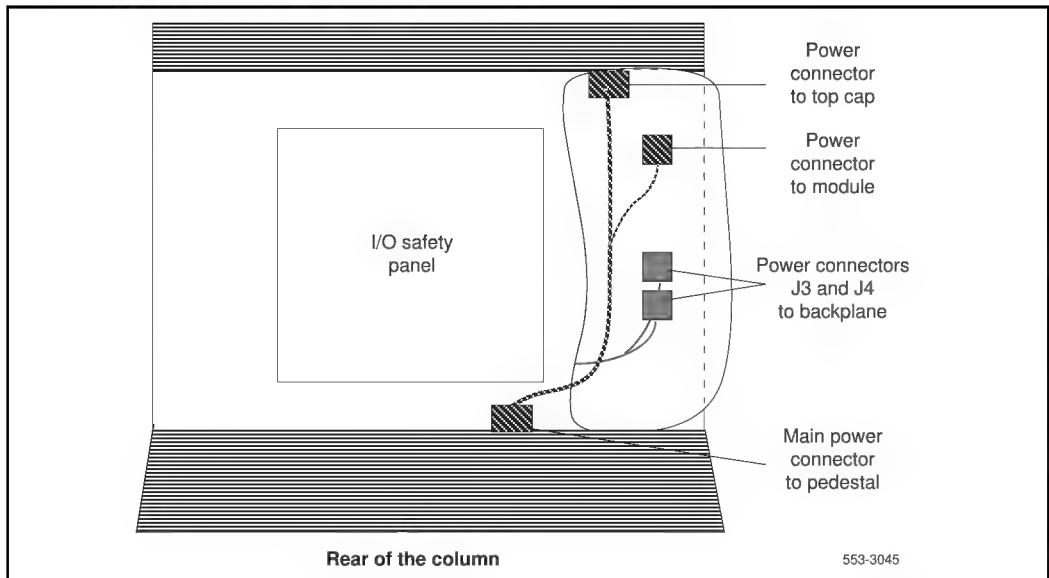
**Symptom:****Green LED off on module power supply (option 21A)**

The green LED is off on the CE/PE power supply, but the main circuit breaker on the PDU is not tripped. Use this procedure to clear the problem.

You may need to replace the NT7D14 CE/PE Power Supply. Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520).

| Possible cause           | Action                                                                                                                                                                                     |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Disconnected power cable | Check the power cable connection to the power supply (see <a href="#">Figure 5</a> ).<br>If all power cables are connected, go to the next possible cause.                                 |
| Defective power supply   | Set the switch on the power supply to OFF (down), wait at least 60 seconds, then set the switch back to ON (up).<br>If the LED on the power supply is still off, replace the power supply. |

**Figure 5**  
**Option 21A power cabling in rear of column**



**Symptom:**  
**Circuit breakers and all column LEDs off (DC power)**

All the LEDs in a column are off and all circuit breakers on the PDU are tripped. You may receive message PWR0004, which indicates that the circuit breakers for the column have tripped. See “PWR” in the *X11 system messages guide* and use this procedure to clear the problem.

*Note:* High room temperature can shut down the system. If all columns in a multi-column system are shut down, check for this external condition.

Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520). You may need to replace one of the following:

- Air filter: P0699798
- Air probe harness: NT8D46AM
- System monitor cables
- Thermostat harness: NT8D46AC

| Possible cause          | Action                                                                                                                                                                                                                    |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Low batteries           | If a TRIP signal to the system has shut down power: <ul style="list-style-type: none"> <li>— Check the cable from the external power system.</li> <li>— Check the batteries and service them as necessary.</li> </ul>     |
| Short circuit or damage | Look for signs of damage (such as smoke, burnt contacts, or melted insulation) that may be caused by a short circuit or misplaced equipment.<br>If you do not find a problem of this type, go to the next possible cause. |

(continued)

| Possible cause                         | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Thermal overload                       | <p>Make sure nothing is blocking ventilation throughout the system. Allow the system to cool for a few minutes, then reset the breakers.</p> <p>If the breakers trip immediately, check the thermostat harness:</p> <ul style="list-style-type: none"> <li>— Make sure the harness is securely connected to the module below it.</li> <li>— Use an ohmmeter to check the connector pins for the harness; if there is an open circuit between pins 3 and 4 or between pins 5 and 6, replace the harness.</li> </ul> <p>If the breakers do not trip immediately, check the air filter:</p> <ul style="list-style-type: none"> <li>— If the filter is dirty and undamaged, clean the filter as described in <i>Meridian 1 general maintenance information</i> (553-3001-500).</li> <li>— If the filter is damaged in any way, replace the filter as described in <i>Meridian 1 hardware replacement</i> (553-3001-520).</li> </ul> <p>If there is no problem with the air filter or if the breakers trip when reset, check the air probe harness:</p> <ul style="list-style-type: none"> <li>— Make sure the harness is securely connected to the module below it.</li> <li>— Use an ohm meter to check the connector pins for the harness; if there is an open circuit between pins 1 and 2, replace the harness.</li> </ul> <p>If there is no problem with this equipment, go to the next possible cause.</p> |
| Defective connection to system monitor | <p>Make sure cables to connectors J5 and J6 are securely connected to the system monitor in the column.</p> <p>Check the system monitor connections to each module.</p> <p>If the breakers trip with all cables connected, replace the cables one at a time until the breakers stay on.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

**Symptom:**  
**Circuit breakers on but all column LEDs off (DC power)**

All the LEDs in a column are off but the circuit breakers on the PDU are not tripped. Use this procedure to clear the problem.

Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520). You may need to replace one of the following:

- External rectifier
- PDU

| Possible cause         | Action                                                                                                                                                                                                                                                                                                     |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| DC wires not connected | <p>If the DC wires are disconnected, connect them.</p> <p>If the wires are already connected or if the column LEDs do not light when they are connected, go to the next possible cause.</p> <div> <b>WARNING</b><br/>           The following test is performed on a live power connection.         </div> |
| No power at DC source  | <p>Make sure the rectifier is on and connected.</p> <p>Make sure the rectifier is receiving power.</p> <p>If there is no problem with the rectifier, go to the next possible cause.</p>                                                                                                                    |
| Defective power cable  | <p>With a meter, test the field wiring connections in the PDU for DC power.</p> <p>If there is no power, replace the cable.</p> <p>If there is power at the connections, go to the next possible cause.</p>                                                                                                |
| Defective PDU          | <p>Replace the PDU.</p>                                                                                                                                                                                                                                                                                    |

**Symptom:****Green LED off on module power supply (DC power)**

The green LED is off on one of the following power supplies:

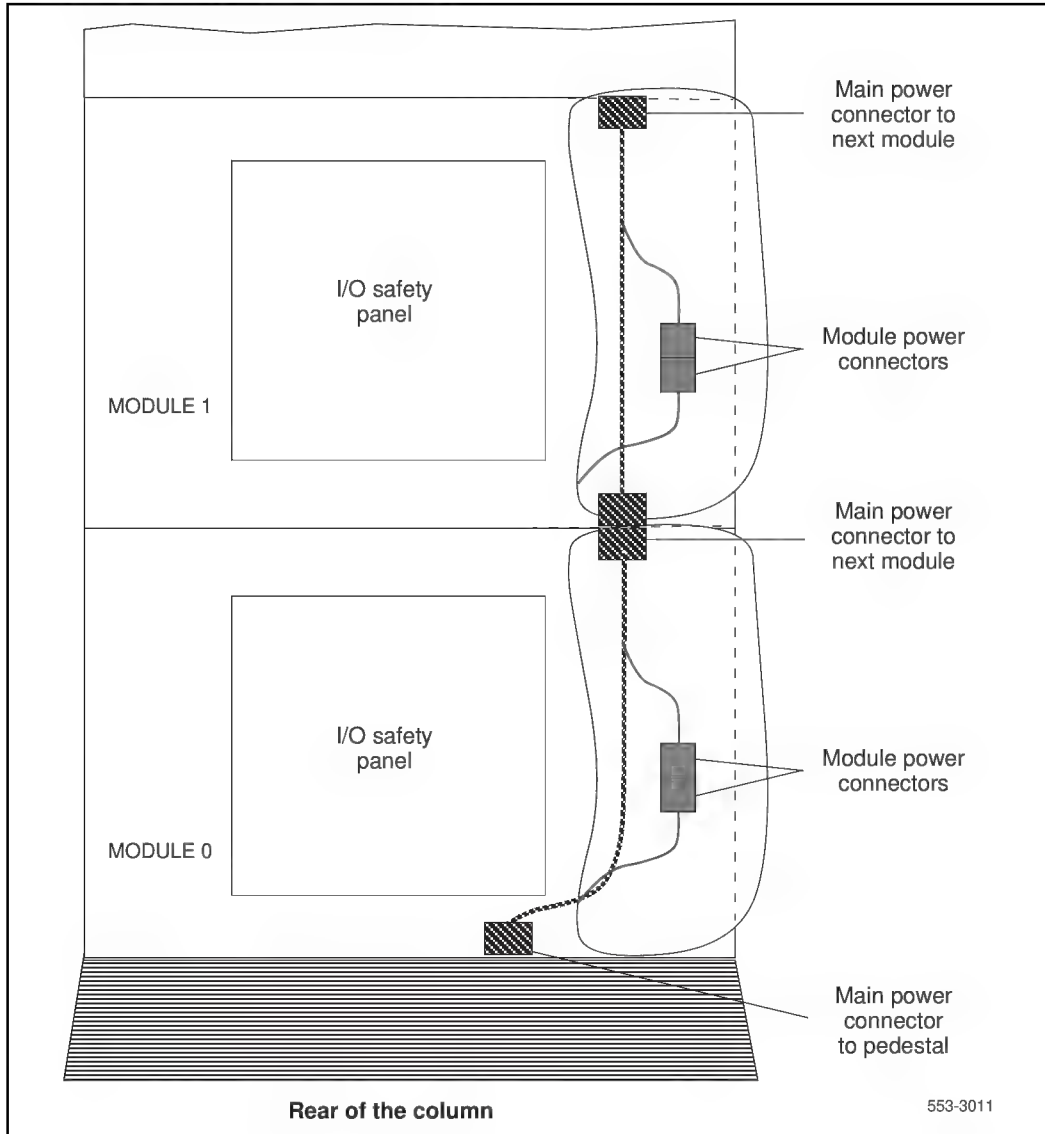
- EEPE power supply: NT5K12
- PE power supply: NT6D40
- CE power supply: NT6D41
- Ringing generator: NT6D42
- CE/PE power supply: NT6D43

You may receive a system message indicating the status of the power supply. See “PWR” in the *X11 system messages guide* and use this procedure to clear the problem.

Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520).

| Possible cause           | Action                                                                                                                                                                                                                                                                      |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Disconnected power cable | <p>Check the power cable connection to the power supply.</p> <p>If the cable is connected, check power cable connections to each module below the affected one (see <a href="#">Figure 6</a>).</p> <p>If all power cables are connected, go to the next possible cause.</p> |
| Defective power supply   | <p>Set the switch on the power supply to OFF (down), wait at least 60 seconds, then set the switch back to ON (up).</p> <p>If the LED on the power supply is still off, replace the power supply.</p>                                                                       |

**Figure 6**  
**DC power cabling in rear of column**





**Symptom:****Defective blower unit indicated (DC power)**

The blower unit circuit breaker (breaker number 5 on the PDU) is tripped and trips when reset. You may receive a system message indicating that there is a failure in the blower. See “PWR” in the *X11 system messages guide* and use this procedure to clear the problem.

Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520). You may need to replace one of the following:

- Blower unit: NT8D52DD
- PDU

| Possible cause                | Action                                                                                                                                                                                             |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Blower unit switch turned off | Set the switch on the front of the blower unit to ON (right). Reset the circuit breaker.<br><br>If the switch was already on or if the circuit breaker trips again, go to the next possible cause. |
| Defective blower unit         | Replace the blower unit and set the circuit breaker to on.<br><br>If the breaker trips, go to the next possible cause.                                                                             |
| Defective PDU                 | Replace the PDU.                                                                                                                                                                                   |

**Symptom:**  
**Main circuit breaker and all column LEDs off (AC power)**

All the LEDs in a column are off and the main circuit breaker on the PDU is tripped. You may receive message PWR0004, which indicates that the main circuit breaker for the column has tripped. See “PWR” in the *X11 system messages guide* and use this procedure to clear the problem.

**Note:** High room temperature or a power surge can shut down the system. If all columns in a multi-column system are shut down, check for these external conditions.

Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520). You may need to replace one of the following:

- Air filter: P0699798
- Air probe harness: NT8D46AM
- System monitor cables
- Thermostat harness: NT8D46AC

| Possible cause          | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Short circuit or damage | Look for signs of damage (such as smoke, burnt contacts, or melted insulation) that may be caused by a short circuit or misplaced equipment.<br><br>If you do not find a problem of this type, go to the next possible cause.                                                                                                                                                                                                                                                                             |
| Thermal overload        | Make sure nothing is blocking ventilation throughout the system. Allow the system to cool for a few minutes then reset the breaker.<br><br>If the breaker trips immediately, check the thermostat harness: <ul style="list-style-type: none"> <li>— Make sure the harness is securely connected to the module below it.</li> <li>— Use an ohmmeter to check the connector pins for the harness; if there is an open circuit between pins 3 and 4 or between pins 5 and 6, replace the harness.</li> </ul> |

(continued)

| Possible cause                         | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                        | <p>If the breakers do not trip immediately, check the air filter:</p> <ul style="list-style-type: none"> <li>— If the filter is dirty and undamaged, clean the filter as described in <i>Meridian 1 general maintenance information</i> (553-3001-500).</li> <li>— If the filter is damaged in any way, replace the filter as described in <i>Meridian 1 hardware replacement</i> (553-3001-520).</li> </ul> <p>If there is no problem with the air filter or if the breaker trips when reset, check the air probe harness:</p> <ul style="list-style-type: none"> <li>— Make sure the harness is securely connected to the module below it.</li> <li>— Use an ohm meter to check the connector pins for the harness; if there is an open circuit between pins 1 and 2, replace the harness.</li> </ul> <p>If there is no problem with this equipment, go to the next possible cause.</p> |
| Defective connection to system monitor | <p>Make sure cables to connectors J5 and J6 are securely connected to the system monitor in the column.</p> <p>Check the system monitor connections to each module.</p> <p>If the breaker trips with the cables connected, replace the cables one at a time until the breaker stays on.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

Symptom:

Main circuit breaker on but all column LEDs off (AC power)

All the LEDs in the column are off but the main circuit breaker on the PDU is not tripped. Use this procedure to clear the problem.

Replace equipment as described in *Meridian I hardware replacement* (553-3001-520). You may need to replace one of the following:

- PDU: NT8D53AB
- Main power cord
- UPS

| Possible cause           | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Power cord not connected | <div>If the power cord for the column is unplugged, plug it in.</div> <div>If the power cord is already plugged in or if the column LEDs do not light when it is plugged in, go to the next possible cause.</div> <div><div><div>WARNING</div><div>The following tests are performed on a live power connection.</div></div></div>                                                                                                                                                                         |
| No power at outlet       | <div>With a meter or test lamp, test for AC power at the outlet.</div> <div>If there is no power at the outlet when AC power is supplied through a UPS unit, repair or replace the UPS following the manufacturer's instructions.</div> <div>If there is no power at the outlet when AC power is supplied through commercial service (not through a UPS), take the necessary steps to have the commercial power restored.</div> <div>If there is power at the outlet, go to the next possible cause.</div> |
| Defective power cord     | <div>With a meter or test lamp, test the field wiring connections in the PDU for AC power.</div> <div>If there is no power, replace the power cord.</div> <div>If there is power at the connections, go to the next possible cause.</div>                                                                                                                                                                                                                                                                  |
| Defective PDU            | Replace the PDU.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

## Symptom:

### Breaker off on MPDU (AC power)

A circuit breaker on a MPDU is tripped and trips when reset. The green LED will be off on the associated power supply:

- NT8D56AA single breaker MPDU: for NT8D29 CE Power Supply
- NT8D56AC single breaker MPDU: for NT7D14 CE/PE Power Supply
- NT8D57AA dual breaker MPDU: for NT8D06 PE Power Supply and NT8D21 Ringing Generator

You may receive a system message indicating the status of the breaker. See “PWR” in the *X11 system messages guide* and use this procedure to clear the problem.

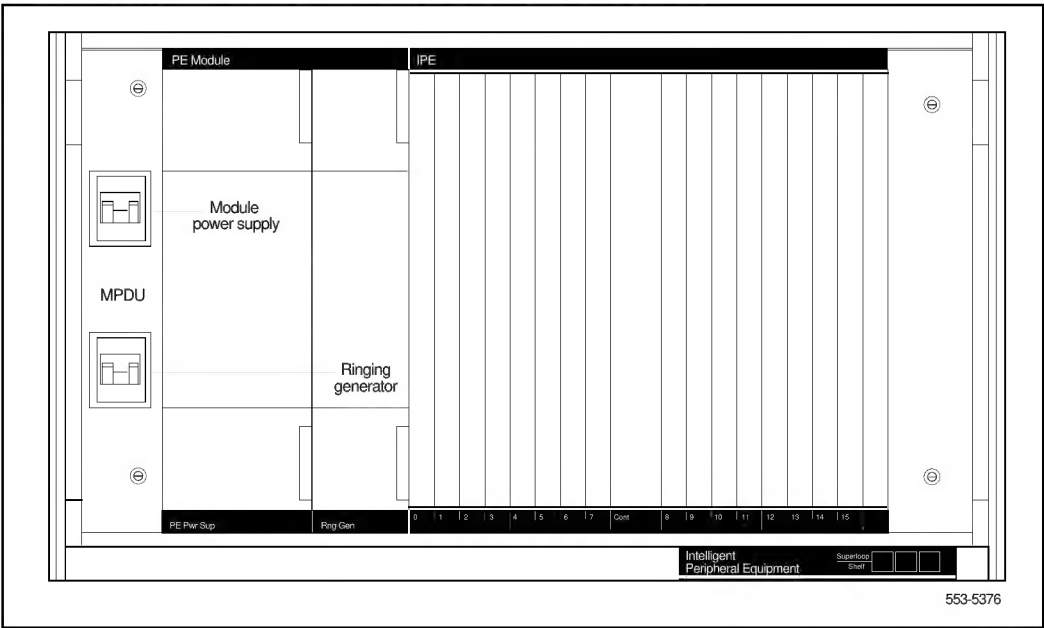
Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520).

| Possible cause                                 | Action                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Short circuit or damage                        | <p>Look for signs of damage (such as smoke, burnt contacts, or melted insulation) that may be caused by a short circuit or misplaced equipment.</p> <p>If you do not find a problem of this type, go to the next possible cause.</p>                                                                                         |
| Defective module power supply (single breaker) | <p>Unseat the associated power supply and reset the breaker.</p> <p>If the breaker does not trip, replace the power supply.</p> <p>If the breaker trips, replace the MPDU.</p>                                                                                                                                               |
| Defective module power supply (dual breaker)   | <p>If one circuit breaker is tripped on a dual MPDU:</p> <ul style="list-style-type: none"> <li>— Unseat the associated power supply (see <a href="#">Figure 7</a>) then reset the breaker.</li> <li>— If the breaker does not trip, replace the power supply.</li> <li>— If the breaker trips, replace the MPDU.</li> </ul> |

(continued)

| Possible cause | Action                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                | <p>If both circuit breakers are tripped:</p> <ul style="list-style-type: none"> <li>Unseat both power supplies, then reset the breakers.</li> <li>If either breaker or both breakers trip, replace the MPDU.</li> </ul> <p>If the breakers do not trip, set them to OFF (down):</p> <ul style="list-style-type: none"> <li>Reinsert one power supply then reset the associated breaker.</li> <li>If the breaker trips, replace that power supply.</li> <li>If the breaker does not trip, set the breaker to OFF and unseat that power supply.</li> <li>Reinsert the other power supply, then reset the associated breaker.</li> <li>If the breaker trips, replace that power supply.</li> </ul> |

**Figure 7**  
**Dual circuit breaker and associated module power supplies**



**Symptom:****Green LED off on module power supply (AC power)**

The circuit breaker on the associated MPDU is not tripped, but the green LED is off on one of the following power supplies:

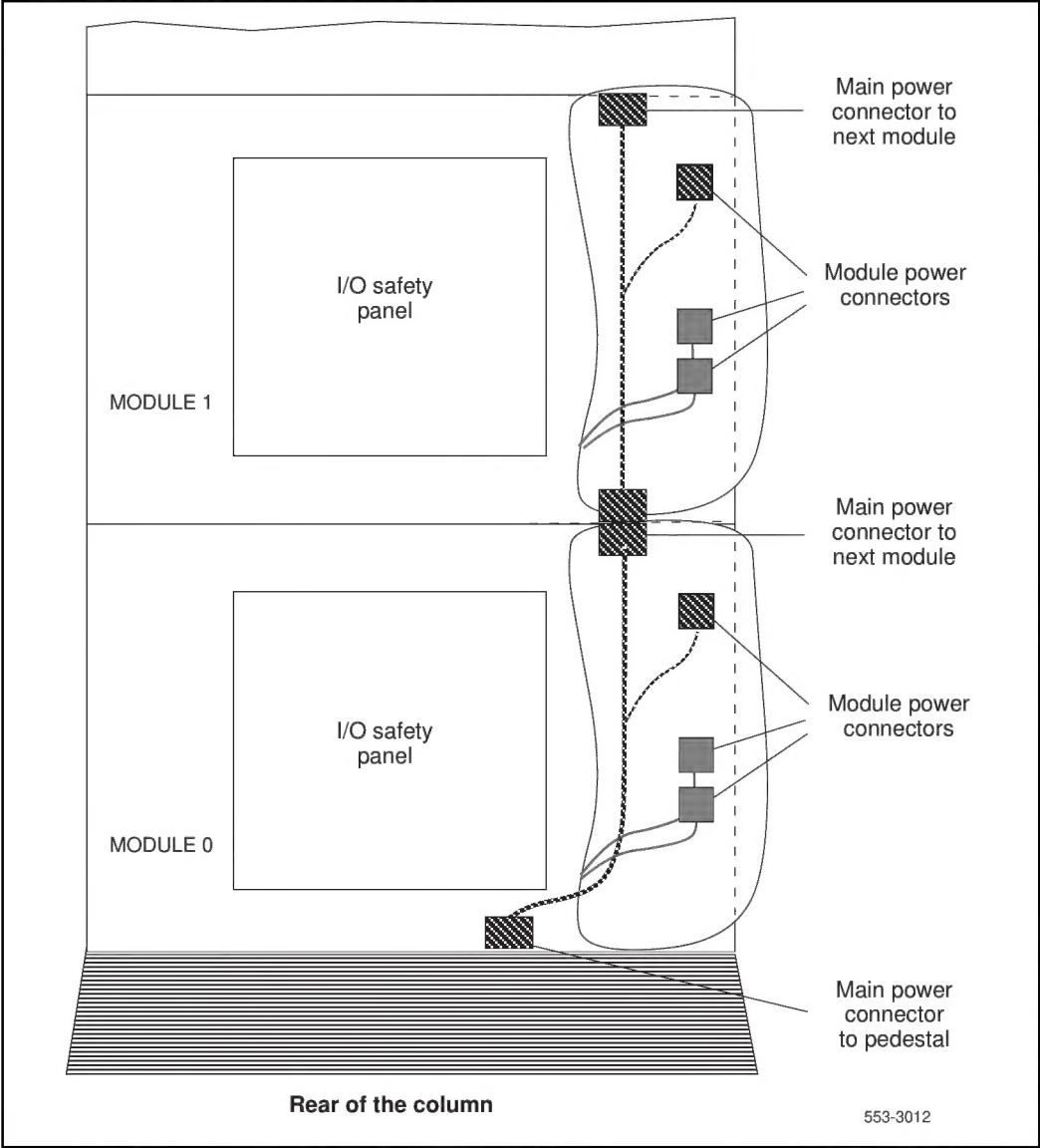
- PE power supply: NT8D06
- CE/PE power supply: NT7D14
- Ringing generator: NT8D21
- CE power supply: NT8D29

You may receive a system message indicating the status of the power supply. See “PWR” in the *X11 system messages guide* and use this procedure to clear the problem.

Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520).

| Possible cause           | Action                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Disconnected power cable | <p>Check the power cable connection between the power supply and the back of the MPDU.</p> <p>If the cable is connected, check power cable connections to each module below the affected one (see <a href="#">Figure 8</a>).</p> <p>If all power cables are connected, go to the next possible cause.</p>                                                             |
| Defective power supply   | <p>Set the circuit breaker on the associated MPDU off, then back on (see <a href="#">Figure 7</a> if there are dual circuit breakers).</p> <p>If the LED on the power supply is still off, replace the power supply.</p> <p>If you replace the power supply, the LED on the replacement should light and stay lit. If it does not, go to the next possible cause.</p> |
| Defective MPDU           | Replace the MPDU.                                                                                                                                                                                                                                                                                                                                                     |

**Figure 8**  
**AC power cabling in rear of column**





**Symptom:****Defective blower unit indicated (AC power)**

The blower unit circuit breaker (located on the front of the unit) is tripped and trips when reset. You may receive a system message indicating that there is a failure in the blower. See “PWR” in the *X11 system messages guide* and use this procedure to clear the problem.

Replace equipment as described in *Meridian 1 hardware replacement* (553-3001-520). You may need to replace one of the following:

- Blower unit: NT8D52AB
- PDU: NT8D53

| Possible cause        | Action                                                                                                                  |
|-----------------------|-------------------------------------------------------------------------------------------------------------------------|
| Defective blower unit | Replace the blower unit and set the circuit breaker to ON (up).<br>If the breaker trips, go to the next possible cause. |
| Defective PDU         | Replace the PDU.                                                                                                        |